## AIR QUALITY PERMIT

Issued To: JTL Group, Inc. (Belgrade) Permit #2788-02

21730 Frontage Road Application Complete: 3/10/04

P.O. Box 9 Preliminary Determination Issued: 04/06/04

Belgrade, MT 59714 Department Decision Issued: 04/22/04

Permit Final: 05/08/04 AFS #777-2788

An air quality permit, with conditions, is hereby granted to JTL Group, Inc. (JTL), pursuant to Sections 75-2-204 and 211, Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

#### Section I: Permitted Facilities

#### A. Plant Location

JTL operates a portable crushing/screening facility that will initially located at the SW ¼ of Section 7, Township 1 South, Range 5 East, in Gallatin County, Montana. However, Permit #2788-02 would apply while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas. An addendum to this air quality permit will be required if JTL intends to locate in or within 10 km of certain PM<sub>10</sub> nonattainment areas. A Missoula County air quality permit will be required for locations within Missoula County. A list of the permitted equipment is contained in Section I.A of the permit analysis.

#### B. Current Permit Action

On March 10, 2004, JTL submitted a complete permit application for the removal of a 1989 Universal impact crusher (maximum capacity 450 tons per hour (TPH)) and the addition of a 1996 Nordberg cone crusher (maximum capacity 410 TPH), a 1993 Seco (8'x20') screen (maximum capacity 425 TPH), a 2001 Deister (8'x20') screen (maximum capacity 1000 TPH), a 1999 Deister (8'x20') screen (maximum capacity 450 TPH), a diesel generator (400 horsepower (HP)), and associated equipment. JTL also requested that the permit be generalized during the update. In addition, the permit was also updated to reflect the current language and rule references used by the Department.

#### Section II: Limitations and Conditions

#### A. Operational Limitations and Conditions

- 1. JTL shall not cause or authorize to be discharged into the atmosphere from any Standards of Performance for New Stationary Sources (NSPS) affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR Part 60, Subpart OOO).
- 2. JTL shall not cause or authorize to be discharged into the atmosphere from any other NSPS-affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).

- 3. JTL shall not cause or authorize to be discharged into the atmosphere, from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).
- 4. Water and water spray bars shall be available on site at all times and operated, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.752).
- 5. JTL shall not cause or authorize to be discharged into the atmosphere from any street, road, or parking lot any visible fugitive emissions that exhibit opacity of 20% or greater averaged over 6 consecutive minutes and must take reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).
- 6. JTL shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).
- 7. Total combined crusher production from the facility shall be limited to 3,679,200 tons during any rolling 12-month time period (ARM 17.8.749).
- 8. JTL shall not operate more than two crushers at any given time and the maximum rated design capacity of the two crushers shall not exceed 555 TPH (ARM 17.8.749).
- 9. Total combined screen production from the facility shall be limited to 5,518,800 tons during any rolling 12-month time period (ARM 17.8.749).
- 10. JTL shall not operate more than three screens at any given time and the maximum rated design capacity of the three screens shall not exceed 1,875 TPH (ARM 17.8.749).
- 11. JTL shall not operate more than one diesel generator at any given time and the maximum rated design capacity shall not exceed 455 Kilowatts (kW) (ARM 17.8.749).
- 12. If the permitted equipment is used in conjunction with any other equipment owned or operated by JTL, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons of emissions during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
- 13. JTL shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

## B. Testing Requirements

 Within 60 days after achieving the maximum production rate, but no later than 180 days after initial startup, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures, as specified in 40 CFR Part 60.675, must be performed on any NSPS affected equipment to demonstrate compliance with the emissions limitations contained in Sections

- II.A.1 and II.A.2 (ARM 17.8.340, 40 CFR Part 60, Subpart A and Subpart OOO).
- 2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 3. The Department may require additional testing (ARM 17.8.105).

## C. Operational Reporting Requirements

- 1. If this portable crushing/screening plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.765).
- 2. JTL shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All records compiled in accordance with this permit shall be maintained by JTL as a permanent business record for at least 5 years following the date of the measurement, must be submitted to the Department upon request, and must be available at the plant site for inspection by the Department (ARM 17.8.749).
- 3. JTL shall supply the Department with annual production information for all emission points, as required, by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of the permit analysis.
  - Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in units as required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).
- 4. JTL shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
- 5. JTL shall document, by month, the total crushing production for the facility. By the 25th day of each month, JTL shall total the crushing production during the previous 12 months to verify compliance with the limitation in Section II.A.7. A written report of the compliance verification shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 6. JTL shall document, by month, the total screening production for the facility. By the 25th day of each month, JTL shall total the screening production during the previous 12 months to verify compliance with the limitation in Section II.A.9. A written report of the compliance verification shall be submitted along with the

## annual emission inventory (ARM 17.8.749).

#### Section III: General Conditions

- A. Inspection JTL shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if JTL fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving JTL of the responsibility for complying with any applicable federal or Montana statute, rule or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing postpones the effective date of the Department decision until the conclusion of the hearing and issuance of a final decision by the Board. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fees Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay of the annual operation fee by JTL may be grounds for revocation of this permit, as required by that Section and rules adopted thereunder by the Board.
- H. Construction Commencement Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked.
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. JTL shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas having a Department approved permitting program.

# PERMIT ANALYSIS JTL Group, Inc. Permit Number 2788-02

#### I. Introduction/Process Description

# A. Permitted Equipment

JTL Group, Inc. (JTL) proposes to operate a 1996 Nordberg cone crusher (maximum capacity 410 tons per hour (TPH)), a 1993 Seco (8'x20') screen (maximum capacity 425 TPH), a 2001 Deister (8'x20') screen (maximum capacity 1000 TPH), a 1999 Deister (8'x20') screen (maximum capacity 450 TPH), a diesel generator (400 horsepower (HP)), and associated equipment. Additionally, JTL owns and operates a 1985 Barmac II Vertical Shaft impact crusher (250 TPH) and associated equipment.

## B. Process Description

JTL proposes to use this crushing/screening plant and associated equipment to crush and screen sand and gravel materials for use in various construction operations. For a typical operational setup, materials are loaded into the crushing/screening plant by a hopper and transferred by conveyor to and passed through two crushers. Materials are crushed, by the crushers and sent to the three screens. Material are screened, separated, and sent to stockpile for sale and use in construction operations.

# C. Permit History

On May 6, 1993, JTL was issued Permit #2788-00 to operate a portable 1989 Universal impact crusher (maximum capacity 450 TPH), a 1985 Barmac II Vertical Shaft impact crusher (maximum capacity 250 TPH), and associated equipment.

On December 27, 1998, JTL was issued Permit #2788-01 to operate a portable 1989 Universal impact crusher (maximum capacity 450 TPH), a 1985 Barmac II Vertical Shaft impact crusher (maximum capacity 250 TPH), and associated equipment. The initial location was identified as the SW ¼ of Section 7, Township 1 South, Range 5 East, in Gallatin County, Montana. Permit 2788-01 replaces Permit #2788-00.

## D. Current Permit Action

On March 10, 2004, JTL submitted a complete permit application for the removal of a 1989 Universal impact crusher (maximum capacity 450 TPH) and the addition of a 1996 Nordberg cone crusher (maximum capacity 410 tons per hour (TPH)), a 1993 Seco (8'x20') screen (maximum capacity 425 TPH), a 2001 Deister (8'x20') screen (maximum capacity 1000 TPH), a 1999 Deister (8'x20') screen (maximum capacity 450 TPH), a diesel generator (400 HP), and associated equipment. JTL also requested that the permit be generalized during the update. In addition, the permit was updated to reflect the current language and rule references used by the Department of Environmental Quality (Department). Permit #2788-02 replaces Permit #2788-01.

## E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT) determinations, air quality impacts, and environmental assessments, is included in the permit analysis associated with each change to the permit.

2788-02 Final: 05/08/04

# II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
  - 1. <u>ARM 17.8.101 Definitions</u>. This rule is a list of applicable definitions used in this subchapter, unless indicated otherwise in a specific subchapter.
  - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
  - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).
    - JTL shall comply with all requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.
  - 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
  - 5. <u>ARM 17.8.111 Circumvention</u>. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
  - 1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
  - 2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
  - 3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
  - 4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
  - 5. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

JTL must comply with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
  - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
  - 2. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, JTL shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
  - 3. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
  - 4. <u>ARM 17.8.310 Particulate Matter, Industrial Processes</u>. This rule requires that no person shall cause or allow to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
  - 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
  - 6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
  - 7. ARM 17.8.340 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, NSPS, shall comply with the standards and provisions of 40 CFR Part 60.
    - In order for a crushing/screening plant to be subject to NSPS requirements, two specific criteria must be met. First, the crushing/screening plant must meet the definition of an affected facility and, second, the equipment in question must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by JTL, the 1996 Nordberg cone crusher, 1993 Seco (8'x20') screen, 2001 Deister (8'x20') screen, 1999 Deister (8'x20') screen, and 1985 Barmac II Vertical Shaft impact crusher are subject to NSPS requirements (40 CFR Part 60, Subpart A General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants).
- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
  - 1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that JTL submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. JTL submitted the required permit application fee for the current permit action.

2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:
  - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
  - 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter, or use any asphalt plant, crusher, or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. JTL has a PTE greater than 15 tons per year of total particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>), and Oxides of Nitrogen (NO<sub>x</sub>); therefore, an air quality permit is required.
  - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.
  - 4. <u>ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis</u>
    <u>Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
  - 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application
    Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. JTL submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. JTL submitted an affidavit of publication of public notice for the March 5, 2004, issue of the Bozeman Daily Chronicle, a newspaper of general circulation in the Town of Bozeman in Gallatin County, as proof of compliance with the public notice requirements.
  - 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

- 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section IV of this permit analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving JTL of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 12. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of JTL, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

including, but not limited to:

- 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
- 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications—Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and does not have a PTE greater than 250 tons per year (excluding fugitive emissions) of any air pollutant.

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
  - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
    - a. PTE > 100 tons/year of any pollutant.
    - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule.
    - c. PTE > 70 tons/year of  $PM_{10}$  in a serious  $PM_{10}$  nonattainment area.
  - 2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2788-02 for the JTL facility, the following conclusions were made:
    - a. The facility's PTE is less than 100 tons/year for any pollutant.
    - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 ton/year of all HAPs.
    - c. This source is not located in a serious  $PM_{10}$  nonattainment area.
    - d. This facility is not subject to any current NESHAP standards.
    - e. The facility is subject to NSPS standards (40 CFR 60, Subpart A, General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants).
    - f. This source is not a Title IV affected source nor a solid waste combustion unit.
    - g. This source is not an EPA designated Title V source.

minor source of emissions, as defined under the Title V Operating Permit Program. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, JTL will be required to obtain a Title V Operating Permit

## III. Emission Inventory

			Tons/Year			
Source	PM	$PM_{10}$	$NO_x$	VOC	CO	$SO_x$
1985 Barmac II Vertical Shaft Impact crusher (145 TPH)	2.30	1.10				
1996 Nordberg cone crusher (410 TPH)	2.30	1.10				
1993 Saco 8'x20' screen (425 TPH)	14.49	6.90				
2001 Deister 8'x20' screen (1000 TPH)	14.49	6.90				
1999 Deister 8'x20' screen (450 TPH)	14.49	6.90				
Material Transfer	25.34	12.23				
Pile Forming	15.45	7.36				
Bulk Loading	3.86	1.84				
Diesel Generator (400 HP)	3.85	3.85	54.31	4.33	11.70	3.59
Haul Roads	2.74	1.23				
Total	99.31	49.41	54.31	4.33	11.70	3.59

• A complete emission inventory for Permit #2788-02 is on file with the Department. The process rate for the facility is based on an average of 210 tons per hour for each of the crushing and screening units and was adjusted to keep the PM<sub>10</sub> emissions below the 50 ton per year Department Modeling Guidance threshold.

# IV. BACT Analysis

A BACT determination is required for any new or altered source. JTL shall install on the new or altered source the maximum air pollution control capability that is technologically practicable and economically feasible, except that BACT shall be used.

Two types of emissions controls are readily available and used for dust suppression at the site and surrounding area of operations; water and chemical dust suppressant. Chemical dust suppressant can be used for dust suppression on the area surrounding the crushing/screening equipment and for emissions from the crushing/screening operations. However, because water is more readily available, is more cost effective, is as effective as chemical dust suppressant in controlling emissions upon the surrounding area of operations, is more environmentally friendly, and is more effective in controlling emissions from crushing/screening equipment and emissions at product transfer points, water has been identified as the most appropriate method of pollution control of particulate emissions from crushing/screening operations and operations in the general plant area. In addition, water suppression has been required of recently permitted similar sources. However, JTL may use chemical dust suppressant to assist in controlling particulate emissions from the surrounding plant area.

JTL shall not cause or authorize to be discharged into the atmosphere from any NSPS affected crusher any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes. JTL shall not cause to be discharged into the atmosphere from any other NSPS affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes. JTL shall not cause to be discharged into the atmosphere from any non-NSPS affected equipment any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes. JTL must take reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, and the general area of operation. JTL is required to use water spray bars and water and/or chemical dust suppressant, as necessary, to maintain compliance with

the opacity and reasonable precaution limitations. The Department determined that using water spray bars, water, and chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for the crushing/screening operations.

Due to the amount of PM,  $PM_{10}$ ,  $NO_x$ , CO, VOC, and  $SO_x$  emissions produced by the diesel generator, add-on controls would be cost prohibitive. The source is relatively small and would be required to comply with operational limits as outlined in Permit #2788-02. Thus, the Department determined that no additional control constitutes BACT for the generator. The control options selected have controls and control costs similar to other recently permitted similar sources and these controls are capable of achieving the established emissions limits.

# V. Existing Air Quality

Permit #2788-02 will cover this portable crushing/screening plant while operating in areas classified as attainment or unclassified for ambient air quality standards, including for the proposed initial site location (the SW  $\frac{1}{4}$  of Section 7, Township 1 South, Range 5 East, in Gallatin County, Montana). This facility is not currently allowed to operate in areas designated as nonattainment for PM<sub>10</sub>.

# VI. Air Quality Impacts

Based on the information provided by JTL and the conditions established in Permit #2788-02, the amount of controlled emissions generated by this facility will not exceed any set ambient air quality standards. In addition, this source is portable and any air quality impacts will be minimal. Included in this permit are operational conditions and limitations that would protect air quality for this site and the surrounding area. Also, this facility is a portable source that would operate on an intermittent and temporary basis and any effects to air quality will be minor and short-lived.

# VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

## VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act (MEPA), was completed for this project. A copy is attached.

## DEPARTMENT OF ENVIRONMENTAL QUALITY

Permitting and Compliance Division Air Resources Management Bureau 1520 East Sixth Avenue P.O. Box 200901 Helena, Montana 59620-0901 (406) 444-3490

# FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For:

JTL Group, Inc.

21730 Frontage Road P.O. Box 9 Belgrade, MT 59714

Permit Number: #2788-02

Preliminary Determination Issued: April 6, 2004 Department Decision Issued: April 22, 2004

Permit Final: May 8, 2004

- 1. Legal Description of Site: JTL submitted a permit application for the addition of equipment to the facility's portable crushing/screening plant in the SW ¼ of Section 7, Township 1 South, Range 5 East, in Gallatin County, Montana. Permit #2788-02 would apply while operating at any location in Montana, except within those areas having a Department approved permitting program, those areas considered to be tribal lands, or those areas in or within 10 kilometers (km) of certain PM<sub>10</sub> nonattainment areas. An addendum to this air quality permit will be required if JTL intends to locate in or within 10 km of certain PM<sub>10</sub> nonattainment areas. A Missoula County air quality permit would be required for locations within Missoula County, Montana.
- 2. Description of Project: The permit application proposes the construction and operation of a portable crushing/screening plant that would consist of a 1985 Barmac II Vertical Shaft impact crusher (250 TPH), a 1996 Nordberg cone crusher (maximum capacity 410 tons per hour (TPH)), a 1993 Seco (8'x20') screen (maximum capacity 425 TPH), a 2001 Deister (8'x20') screen (maximum capacity 1000 TPH), a 1999 Deister (8'x20') screen (maximum capacity 450 TPH), a diesel generator (400 horsepower (HP)), and associated equipment.
- 3. *Objectives of Project*: The object of the project would be to produce business and revenue for the company through the increased sale and use of aggregate products. The issuance of Permit #2788-02 would allow JTL to operate the permitted equipment at various locations throughout Montana, including the proposed initial site location.
- 4. Additional Project Site Information: In many cases, this crushing operation may move to a general site location or open cut pit, which has been previously permitted through the Industrial and Energy Minerals Bureau (IEMB). If this were the case, additional information for the site would be found in the Mined Land Reclamation Permit for that specific site.
- 5. Alternatives Considered: In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because JTL demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

- 6. A Listing of Mitigation, Stipulations, and Other Controls: A listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in Permit #2788-02.
- 7. Regulatory Effects on Private Property Rights: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would not unduly restrict private property rights.
- 8. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no action alternative" was discussed previously.

		Major	Moderate	Minor	None	Unknow n	Comments Included
A.	Terrestrial and Aquatic Life and Habitats			X			yes
В.	Water Quality, Quantity, and Distribution			X			yes
C.	Geology and Soil Quality, Stability, and Moisture			X			yes
D.	Vegetation Cover, Quantity, and Quality			X			yes
E.	Aesthetics			X			yes
F.	Air Quality			X			yes
G.	Unique Endangered, Fragile, or Limited Environmental Resource				X		yes
Н.	Demands on Environmental Resource of Water, Air, and Energy			X			yes
I	Historical and Archaeological Sites				X		yes
J.	Cumulative and Secondary Impacts			X			yes

**Summary of Comments on Potential Physical and Biological Effects:** The following comments have been prepared by the Department.

#### A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same area as the crushing/screening operations. Impacts on terrestrials and aquatic life could result from stormwater runoff and pollutant deposition, but such impacts would be minor, as the crushing/screening operations would be considered a minor source of emissions and would have intermittent and seasonal operations. Therefore, storm water runoff would not deposit large quantities of pollutant emission into any surrounding water resources and, therefore, would not create adverse impacts upon surrounding terrestrial and aquatic life. Furthermore, the air emissions would have only minor effects on terrestrial and aquatic life because facility emissions would be well dispersed in the area of operation (See Section 8.F). Also, Reese Creek is more than 100 meters away from the proposed operational site and, at such distances, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from the proposed crushing/screening operation because only minor amounts of pollutants would reach the water body. Therefore, due the minor amount of emissions generated and the dispersion of pollutant emissions, only minor and temporary effects and aquatic life and habitat would be expected from the proposed crushing/screening operation.

# B. Water Quality, Quantity, and Distribution

Water would be required for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, water use would only cause a minor surface disturbance to the proposed operational site, since only relatively small amounts of water would be required to be used for pollution control. Therefore, at most, only minor surface and groundwater quality impacts would be expected as a result of using water for dust suppression because only small amounts of water would be required and deposition of air pollutants upon surrounding water bodies would be minor (See Section 8.F).

# C. Geology and Soil Quality, Stability, and Moisture

The crushing/screening operations would have only minor impacts on geology and soil quality, stability, and moisture because the crushing/screening facility would generally locate within a previously disturbed open-cut pit. The deposition of air pollutants on soils would be minor (See Section 8.F) because operations would be seasonal and intermittent, relatively small amounts of pollution would be generated, and air pollutant dispersion would greatly minimize the impacts from the pollution on the surrounding soils. Facility construction, aggregate mining, and traffic operating within the site may cause soil compaction that could impact water infiltration and surface water runoff at the site. However, such impacts would be minor and would only have minor effects upon soils (geology and soil quality, stability, and moisture) and water resources (water quality, quantity, and distribution) at the site because the average depth of groundwater resources is over 100 feet below the site and the nearest free flowing surface water is 1/3 mile away.

# D. Vegetation Cover, Quantity, and Quality

Minor, if any impacts would occur on vegetative cover, quality, and quantity because the facility would operate at a site where vegetation has been previously removed/disturbed. The facility would be a relatively minor source of emissions and the pollutants would be greatly dispersed (See Section 8.F); therefore, deposition on vegetation from the proposed project would be minor. Also, because the water usage would be minimal (See Section 8.B) and the associated soil disturbance from the application of water and any runoff would be minimal (See Section 8.C), corresponding vegetative impacts would be minor.

## E. Aesthetics

The crushing/screening operation would be visible and would create additional noise while operating in the initial proposed site location. However, Permit #2788-02 would include conditions to limit the opacity of the plant, as well as conditions requiring water spray bars and other means to control air pollution. Also, because the crushing/screening operation would be portable, would operate on an intermittent and seasonal basis, and would locate within an existing open-cut pit, any visual and noise impacts would be minor and short-lived.

# F. Air Quality

Air quality impacts from the proposed project would be minor because the facility would be relatively small, would operate on an intermittent and temporary basis, and would locate in a previously disturbed open-cut pit. Permit #2788-02 would include conditions limiting the facility's opacity, and crushing/screening production from the plant, as well as conditions requiring water spray bars to control air pollution. In addition, water spray bars and reasonable precautions would be required to control emissions from haul roads, access roads, parking lots, and the general work area. Permit #2788-02 would also limit total emissions from the crushing/screening facility and any additional JTL equipment operated at the site to 250 tons/year or less, excluding fugitive emissions.

Further, the Department determined that the crushing/screening facility would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's PTE is below the major source threshold level of 100 tons per year for any regulated pollutant.

Pollutant deposition from the facility would be minimal and the pollutants emitted from the facility would be widely dispersed (from factors such as wind speed and wind direction). The corresponding impacts of pollutants from deposition on surrounding soils, vegetation, water resources, human populations, and terrestrial and aquatic life would be minor. Air quality impacts from operating the crushing/screening equipment in this area would be minor.

# G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to unique endangered, fragile, or limited environmental resources in the proposed area of operations, contacted the Montana Natural Heritage Program (MNHP) to identify any species of concern associated with the initial proposed site location (the SW ¼ of Section 7, Township 1 South, Range 5 East, in Gallatin County, Montana). Search results concluded there are no known environmental resources of special concern within the defined area. The defined area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer. Based on the small size and temporary nature of the equipment operations, the fact that the facility operations would take place in a previously mined area, and the minimal disturbance expected to the environment (water, air, and soils), the Department determined that no impacts to any unique endangered, fragile, or limited environmental resources would occur.

# H. Demands on Environmental Resources of Water, Air, and Energy

Due to the relatively small size of the facility, the crushing/screening operations would only require small quantities of water and energy for proper operation. Only small quantities of water would be required to be used for dust suppression to control emissions being generated at the site and water to be used would be obtained from an existing well. Further, a ground water study was done and it was determined that no impacts to surrounding water resources and water users would occur. Energy requirements would be small because the facility would be a crushing/screening operation that would be powered by one industrial diesel generator. The facility would use a limited amount of fuel (a non-renewable resource), would have limited production, and would have seasonal and intermittent use. In addition, impacts to air resources would be minor because the source would be a small industrial emissions source, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed. Therefore, any impacts to water, air, and energy resources would be minor.

## I. Historical and Archaeological Sites

The Department previously contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction/operation. Search results concluded that there were no previously recorded historical or archaeological resource of concern within the area proposed for initial operations. Further, according to past correspondence from SHPO, there would be a low likelihood of adverse disturbance to any known archaeological or historic site given previous industrial disturbance to an area. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the proposed crushing/screening equipment because the operational site has already been disturbed and because no previously recorded historical/archaeological resources have been identified at the proposed operational site location.

## J. Cumulative and Secondary Impacts

The crushing/screening operation would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generate relatively minor amounts of PM, PM<sub>10</sub>, NO<sub>x</sub>, VOC, CO, and SO<sub>x</sub> emissions. Noise generated by equipment operations would be minimal because the equipment would operate in a remote location and in a bermend open-cut pit. Emissions generated from facility operations would result in only minor deposition upon surrounding resources and the facility would have intermittent and seasonal operations. Additionally, this facility, in combination with other JTL facilities would not be permitted to exceed 250 tons per year of non-fugitive emissions. Therefore, any cumulative or secondary impacts to the physical and biological aspects of the human environment would be minor.

9. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no action alternative" was discussed previously.

		Major	Moderate	Minor	None	Unknow n	Comments Included
A.	Social Structures and Mores				X		yes
В.	Cultural Uniqueness and Diversity				X		yes
C.	Local and State Tax Base and Tax Revenue			X			yes
D	Agricultural or Industrial Production			X			yes
E.	Human Health			X			yes
F.	Access to and Quality of Recreational and Wilderness Activities			X			yes
G	Quantity and Distribution of Employment				X		yes
H.	Distribution of Population				X		yes
I.	Demands for Government Services			X			yes
J.	Industrial and Commercial Activity			X			yes
K.	Locally Adopted Environmental Plans and Goals			X			yes
L.	Cumulative and Secondary Impacts			X			yes

# **SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS**: The following comments have been prepared by the Department.

## A. Social Structures and Mores

The crushing/screening operation would cause no disruption to the social structures and mores in the area because the source would be a minor industrial source of emissions, would be operating at an area designated and currently used for aggregate mining, would be separated from the general population, and would only have temporary and intermittent operations. Additionally, the equipment would be expected to operate according to the conditions placed in Permit #2788-02. Thus, no impacts upon social structures or mores would result.

## B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not be impacted by the proposed crushing/screening operation because this site has been previously designated and used for crushing/screening of aggregate and is separated from the general population. Additionally, the facility would be considered a portable/temporary source with seasonal and intermittent

operations. Therefore, the predominant use of the surrounding areas would not change as a result of this project and the cultural uniqueness and diversity of the area would not be affected.

# C. Local and State Tax Base and Tax Revenue

The crushing/screening operations would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a relatively small industrial source (minor source) and would have seasonal and intermittent operations. The facility would require the use of only a few existing employees. Thus, only minor impacts to the local and state tax base and revenue could be expected from facility production. Furthermore, the impacts to local tax base and revenue would be minor because the source would also be portable and the money generated for taxes would be widespread.

## D. Agricultural or Industrial Production

The crushing/screening operations would have only a minor impact on local industrial production since the facility would be a relatively small industrial source of aggregate production and air emissions. Also, the facility would locate in an existing permitted open-cut pit, adjacent to an area that could be used for animal grazing. Additional industrial resources are not expected as the result of this facility. However, the facility operations would be small and temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts on surrounding vegetation (as described in Section 8.D of this EA). Pollution control would be utilized for equipment operations and production limits would be established to minimize emissions.

## E. Human Health

Permit #2788-02 would incorporate conditions to ensure that the crushing/screening facility would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 8.F. of this EA, the air emissions from this facility would be minimized by the use of water spray and other process limits. Furthermore, dispersion of pollutants would result in minimal impacts upon the surrounding area of operations and pollutants would be widely dispersed (see Section 8.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed crushing/screening facility.

# F. Access to and Quality of Recreational and Wilderness Activities

Noise from the facility would be minor because the facility would be a crushing/screening operation that would operate within an existing industrial open-cut pit site. The surrounding area of operations would also include Interstate 90 to the south, Montana Rail Link railroad to the north, and active gravel pits to the east and west. The proposed site is bermed and is in a designated industrial area that is removed from the general population. As a result, the amount of noise generated from the crushing/screening operations would be minimal. Also, the facility would operate on a seasonal and intermittent basis at this existing pit site and would be a relatively minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at this site would be expected to be minor and intermittent.

## G. Quantity and Distribution of Employment

The portable crushing/screening operation is relatively small, would have seasonal and intermittent operations, and would only require a few employees to operate. No individuals would be expected to permanently relocate to this area of operation as a result of operating the crushing/screening facility, since JTL would be expected to utilize existing employees for this temporary project. Therefore, no effects upon the quantity and distribution of employment in this

area would be expected.

# H. Distribution of Population

The portable crushing/screening operation is small and would only require a few existing employees for proper operation. No individuals would be expected to permanently relocate to this area of operation as a result of operating the crushing/screening facility, which would have only intermittent and seasonal operations, and would be a portable source. Therefore, the crushing/screening facility would not disrupt the normal population distribution.

#### I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the crushing/screening operation is in progress. In addition, government services would be required for acquiring the appropriate permits, maintaining compliance with the appropriate permits, and for providing corresponding government services to maintain roads. Demands for government services would be minor.

# J. Industrial and Commercial Activity

The crushing/screening operation would represent only a minor increase in the industrial activity in this or any other area of operation because the source would be a relatively small industrial source that would be portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed operation.

## K. Locally Adopted Environmental Plans and Goals

JTL would be allowed, by permit, to operate in areas designated by EPA as attainment or unclassified, including the proposed initial site location. Permit #2788-02 would contain production and opacity limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards, as a state adopted environmental plan or goal and would apply to JTL while operating at this proposed site. However, the Department is not aware of any related locally adopted environmental plans or goals to further regulate facility operations. Because the facility would be a small and portable source, and would have intermittent and seasonal operations, any impacts from the facility would be minor and short-lived.

## L. Cumulative and Secondary Impacts

The crushing/screening operations would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate areas of operation because the source is a portable and temporary source. Further, no other industrial operations are expected to result from the permitting of this facility. Minor increases in traffic would have minor effects on local traffic in the immediate area. Because the source is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Further, this facility may be operated in conjunction with other equipment owned and operated by JTL, but any cumulative impacts upon the social and economic aspects of the human environment would be minor and short-lived. Thus, only minor and temporary cumulative effects would result to the local economy.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor; therefore, an EIS is not required.

Other groups or agencies contacted or which may have overlapping jurisdiction: Department of Environmental Quality - Permitting and Compliance Division (Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

*Individuals or groups contributing to this EA*: Department of Environmental Quality (Air Resources Management Bureau and Industrial and Energy Minerals Bureau), Montana State Historic Preservation Office (Montana Historical Society).

EA prepared by: Ron Lowney

Date: March 24, 2004